

Abstract of the Disclosure

This invention provides a methodology for negotiating parameters in a distributed computing environment. The invention may be implemented in a way which is simple, general and robust. Leasing, deadlock detection and starvation detection may be provided. The invention may be applied to automatic configuration of networked devices and their services. In one embodiment, devices on a computer network provide services. In each instance where one service imports functionality from another service a finite state machine associated with each service is instantiated. The finite state machines exchange messages which cause them to progress through a sequence of states. The messages contain configuration data. When the finite state machines have reached their final states the functionality in question is made available to the importing service. The finite state machines enforce incremental negotiation. The finite state machines also provide smooth recovery from errors and interruptions in network availability.